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Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
<b>FAN ASSEMBLIES, AND THERMOSTATS</b>				<b>HEATERS</b>			
A.	<b>4W</b> Standard Energy Efficient Fan Assembly	(1)		E.	208V Evaporator Defrost Heaters	(5)	
	0477653	Fan Motor, Evaporator (MO.4410544)			3016520	4 ft case (HE.4850637)	
	0464847	Fan Blade (FB.4780649)			3016522	6 ft case (HE.4850620)	
B.	Optional Adjustable Refrigeration Thermostat	(2)			3016524	8 ft case (HE.4850603)	
C.	0398557	Defrost Termination Thermostat (Electric Defrost only) (CT.4440611)	(3)		3016527	12 ft case (HE.4850571)	
D.	0481370	Heater Switch (Koolgas Defrost only) (CT.4440738)	(4)	F.	208V Drip Pan Defrost Heaters, Electric	(6)	
					0481865	4 ft case (HE.4850638)	
					0444300	6 ft case (HE.4850609)	
					0462160	8 ft case (HE.4850636)	
					0444296	12 ft case (HE.4850572)	
					120V Drip Pan Defrost Heaters, Koolgas	(7)	
					0488967	4 ft case (HE.4850641)	
					0465906	6 ft case (HE.4850628)	
					0465907	8 ft case (HE.4850622)	
					0465908	12 ft case (HE.4850623)	
				G.	Nosing Anti-sweat Heaters	(8)	
					0495009	4 ft case (HE.4880687)	
					0495006	6 ft case (HE.4850684)	
					0495007	8 ft case (HE.4850685)	
					0495008	12 ft case (HE.4850686)	

Data sheet-Excel-FN

Note: Revision J: Added high glide refrigerant note. Other changes marked by bar, underline or circle.

# Engineering Plan Views

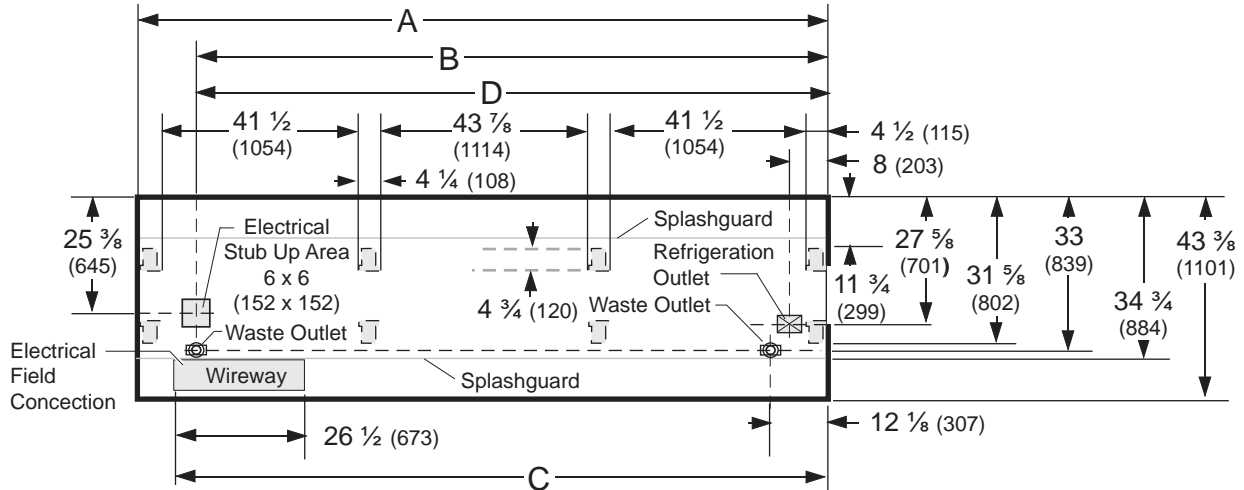
## PHYSICAL DATA

Merchandiser Drip Pipe (in.)	1 1/4
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	5/8

### Low / Medium Temperature

07-2009

Dimensions shown as inches & (mm).



**NOTE: Case-to-Case Electrical Connections are made IN FRONT OF SPLASHGUARD.**

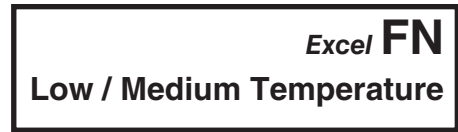
FRONT

	4 ft	6 ft	8 ft	12 ft
<b>General</b>				
<b>(A)</b> Case Length ( <i>without ends or partitions</i> )	48 1/4 (1226)	73 3/4 (1873)	96 3/8 (2448)	144 1/2 (3670)
<i>(Each end and insulated partition adds 2 in. (51 mm) to case line up.)</i>				
Maximum O/S dimension of case back to front ( <i>includes bumper</i> )	43 3/8 (1101)	43 3/8 (1101)	43 3/8 (1101)	43 3/8 (1101)
Back of case to front of splashguard	34 3/4 (884)	34 3/4 (884)	34 3/4 (884)	34 3/4 (884)
Back of case to O/S edge of front leg	31 5/8 (802)	31 5/8 (802)	31 5/8 (802)	31 5/8 (802)
Distance between edges of external legs and center legs	NA	30 1/4 (768)	41 1/2 (1054)	41 1/2 (1054)
Distance between edges of center legs	NA	NA	NA	43 7/8 (1114)
Distance between front legs and splashguard	3 1/8 (82)	3 1/8 (82)	3 1/8 (82)	3 1/8 (82)
<b>Electrical Service</b> <input checked="" type="checkbox"/> ( <i>Electrical Field Wiring connection point</i> )				
<b>(B)</b> RH End of case to center of stub up area	36 1/8 (9018)	61 5/8 (1565)	84 1/4 (2141)	132 3/8 (3363)
Back of case to center of stub up area	25 3/8 (645)	25 3/8 (645)	25 3/8 (645)	25 3/8 (645)
Length of electrical wireway <input type="checkbox"/> <b>Wireway</b>	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)	26 1/2 (673)
<b>(C)</b> RH End of case to LH end of wireway	40 1/2 (1029)	67 1/2 (1715)	90 1/8 (2289)	138 1/4 (3511)
<b>Waste Outlets</b> ( <i>One each end</i> ) <input checked="" type="checkbox"/>				
<b>(D)</b> RH End of case to the center of LH waste outlet	36 1/8 (918)	61 5/8 (1565)	84 1/4 (2141)	132 3/8 (3363)
RH End of case to the center of RH waste outlet	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)	12 1/8 (307)
Back O/S of case to center of waste outlets	33 (839)	33 (839)	33 (839)	33 (839)
Schedule 40 PVC drip pipe	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)	1 1/4 (32)
<b>Refrigeration Outlet</b> <input type="checkbox"/>				
Back of case to center of refrigeration outlet	27 5/8 (701)	27 5/8 (701)	27 5/8 (701)	27 5/8 (701)
RH end of case to center of refrigeration outlet	8 (203)	15 (381)	8 (203)	8 (203)

Narrow Island Display with Solid Walls



Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.



REFRIGERATION DATA§

**Note:** This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H.

	MED	FF	IC
Discharge Air (°F)	+24	-12	-22
Evaporator (°F)	+19	-20	-30
Unit Sizing (°F)	+17	-23	-33

§ Average evaporator temperature shown. Use dew point for high glide refrigerants for unit sizing. Care should be taken to use the dew point in PT tables for measuring and adjusting superheat. Adjust evaporator pressure as needed to maintain discharge air temperature shown.

<i>Btuh</i> lft	MED	FF	IC
Parallel	271	381	391
Conventional	281	396	406

DEFROST DATA

	MED	FF	IC
Frequency (hr)	24	24	24
Defrost Water (lb/ft/day)	0.8	0.75	0.6

(± 15% based on case configuration and product loading).

<i>ELECTRIC</i>	MED	FF	IC
Temp Term (°F)	48	48	48
Failsafe (minutes)	60	60	60

<i>GAS</i>	MED	FF	IC
Duration (minutes)	NA	15	18

*OFFTIME* Not Recommended

Standard Defrost Thermostat

Close on rise: close 48°F — open 33°F

CONVENTIONAL CONTROLS

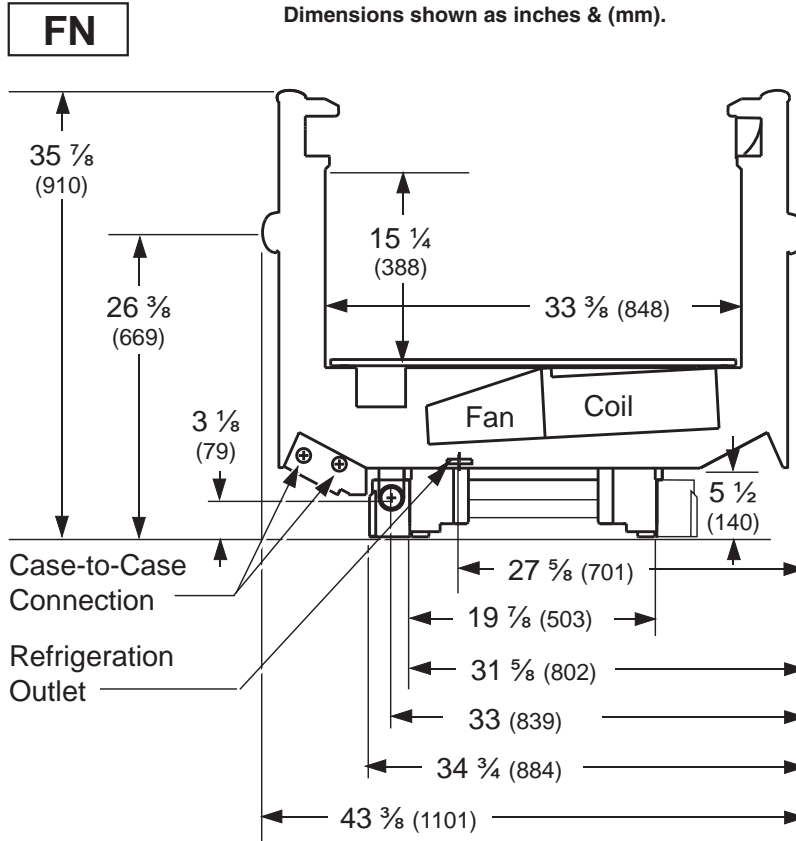
Low Pressure Backup Control — CI/CO \*

MED	+12°F / +2°F
FF	-17°F / -29°F
IC	-27°F / -39°F

Indoor Unit Only, Pressure Defrost Termination\*

Not Recommended

\*Use a Temperature Pressure Chart to determine PSIG conversions.



Estimated Charge **		FN	
4 ft	1.0 lb	16 oz	0.5 kg
6 ft	1.5 lb	24 oz	0.7 kg
8 ft	2.0 lb	32 oz	0.9 kg
12 ft	3.0 lb	48 oz	1.4 kg

\*\*This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound (8 oz/0.2 kg).

NSF Certification

This merchandiser model is manufactured to meet NSF/ANSI (National Sanitation Foundation) Standard #7 requirements for construction, materials & cleanability.

**Electrical Data**

	<b>4 ft</b>	<b>6 ft</b>	<b>8 ft</b>	<b>12 ft</b>						
<b>Number of Fans – 4W Evaporator</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>						
		<b>Amperes</b>					<b>Watts</b>			
	<b>4 ft</b>	<b>6 ft</b>	<b>8 ft</b>	<b>12 ft</b>	<b>4 ft</b>	<b>6 ft</b>	<b>8 ft</b>	<b>12 ft</b>		
<b>Evaporator Fans</b>										
120V 50/60Hz Standard Energy Efficient	0.12	0.12	0.24	0.24	8	8	16	16		
230V 50/60Hz Standard Energy Efficient	0.06	0.06	0.12	0.12	8	8	16	16		
230V 60Hz Export	0.15	0.15	0.30	0.30	24	24	48	48		
230V 50Hz Export	0.18	0.18	0.36	0.36	27	27	54	54		
<b>Anti-sweat Heaters (on fan circuit)</b>										
120V 50/60Hz Standard	0.33	0.50	0.67	1.00	40	60	80	120		
230V 50/60Hz Export	0.18	0.26	0.35	0.52	40	60	80	120		
<b>Minimum Circuit Ampacity</b>										
120V 50/60Hz Standard Energy Efficient	0.65	0.82	1.11	1.44						
230V 50/60Hz Standard Energy Efficient	0.44	0.52	0.67	0.84						
230V 60Hz Export	0.68	0.61	0.85	1.02						
230V 50Hz Export	0.56	0.64	0.91	1.08						
<b>Maximum Over Current Protection 120V</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>						
<b>Maximum Over Current Protection 230V</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>						
<b>208V Electric Defrost</b>	4.4	6.54	7.69	11.54	910	1360	1600	2400		
<b>230V Export Electric Defrost</b>	3.8	5.91	6.96	10.43	800	1360	1600	2400		
<b>120V Koolgas Defrost</b>	0.92	1.33	1.67	3.33	110	160	200	400		
<b>208V Koolgas Defrost</b>	0.53	0.77	0.96	1.92	110	160	200	400		
<b>230V Koolgas Defrost</b>	0.59	0.85	1.06	2.12	135	196	244	488		
<b>Standard Lighting</b>										
None										

**Product Data**

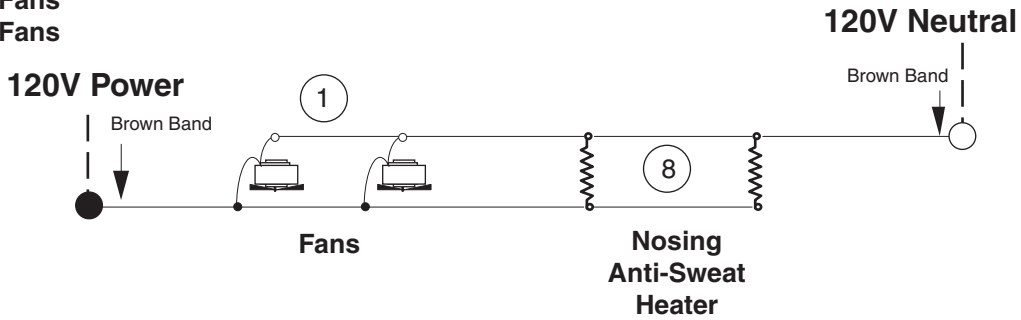
<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Ft)	3.54 ft <sup>3</sup> /ft (0.33 m <sup>3</sup> /m)
<i>AHRI Total Display Area</i> <sup>2</sup> (Sq Ft/Ft)	2.60 ft <sup>2</sup> /ft (0.79 m <sup>2</sup> /m)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Ft)	2.78 ft <sup>2</sup> /ft (0.85 m <sup>2</sup> /m)

- <sup>1</sup> AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft<sup>3</sup>/ft [m<sup>3</sup>/m]
- <sup>2</sup> Computed using AHRI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>]/Unit of Length, ft [m]
- <sup>3</sup> Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is NONE.

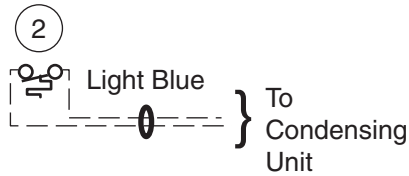
<b>ESTIMATED SHIPPING WEIGHT <sup>5</sup></b>					
<b>Case</b>	<i>4 ft</i>	<i>6 ft</i>	<i>8 ft</i>	<i>12 ft</i>	<b>Solid End</b>
					<i>(each)</i>
<b>lb (kg)</b>	600 (272)	800 (363)	1000 (454)	1200 (544)	50 (23)
<sup>5</sup> Actual weights will vary according to optional kits included.					

# Electric Defrost – Standard

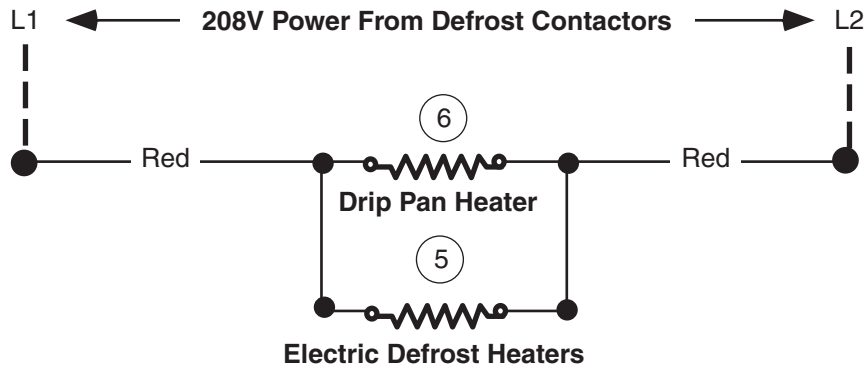
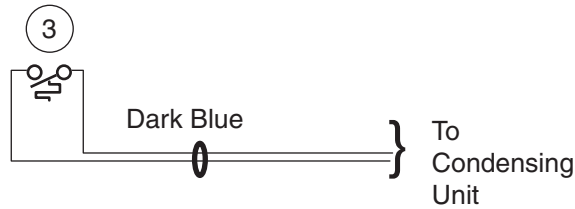
- 4 Ft – 1 Fan
- 6 Ft – 1 Fan
- 8 Ft – 2 Fans
- 12 Ft – 2 Fans



## Refrigeration Thermostat (Optional)



## Defrost Termination Thermostat

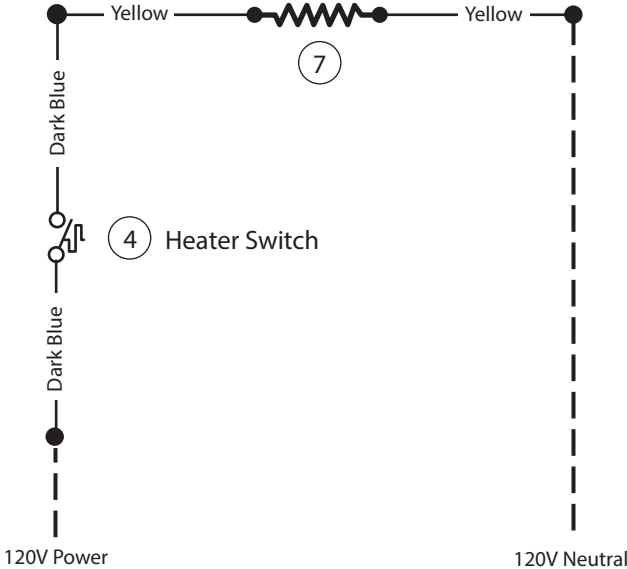


## WARNING

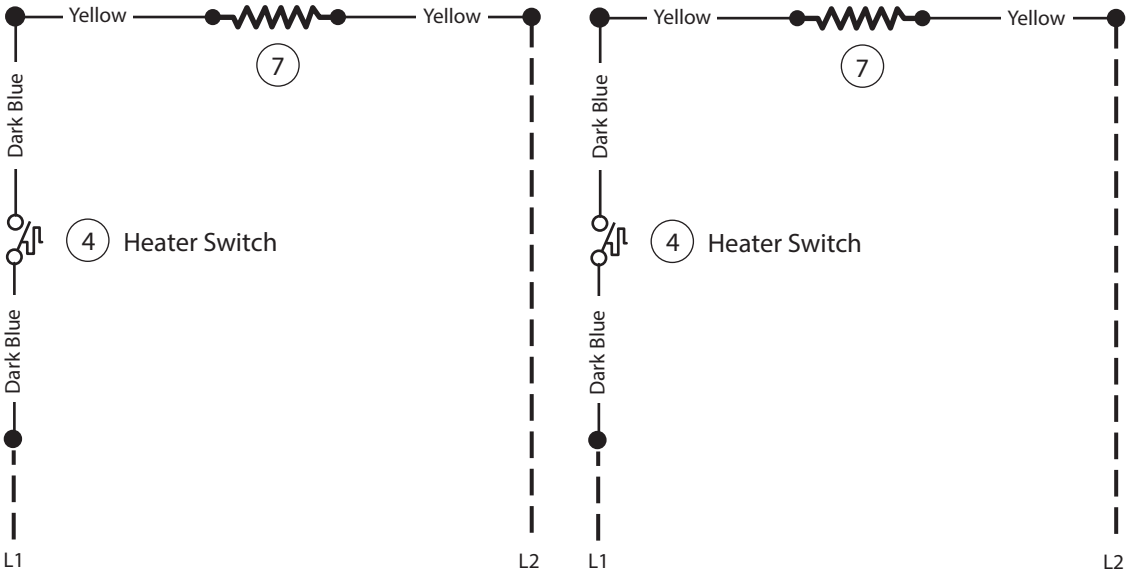
All components must have mechanical ground, and the merchandiser must be grounded.  
Circled Number = Parts List Item Numbers

# Gas Defrost – Optional

## 120V Drip Pan Heater — Koolgas Only



## 208V/230V Drip Pan Heater — Koolgas Only



**WARNING**

All components must have mechanical ground, and the merchandiser must be grounded.  
Circled Number = Parts List Item Numbers